Presentation Outline

- Motivating problems
- What is Culture?
- How can we operationalize culture?
- Observations and Hypotheses
- Modeling
- Contributions
Examples of Global Projects

- Intel Assembly/Test Facility US, Ireland, Malaysia
- Planet Hollywood restaurants in Asia, Australia and S.Africa
- Hines development projects in France, Poland
- Water Supply Project in St. Petersburg
High-level Research Problems

- How can we analyze and predict the effects of cultural differences on Global Projects?

- How can we design an organization to ensure optimal performance on a Global Project?
How Project Design can Improve the Outcomes of Global Projects
Theories of Culture

Group Culture

Integration

Differentiation

Fragmentation
What is Culture?
The Integration Perspective

- A set of shared experiences
- That lead to the development of shared norms, beliefs and values
- That are subconsciously ‘assumed’ by the group
- Which leads to the generation of accepted practices and behavior

_Culture is defined on a per-group basis!!!_
What does culture look like?

- Symbols
- Heroes
- Rituals
- Practices

VALUES

- Easier to Change
- Hard to Change
What is Organizational Culture?

A set of shared beliefs that drive behavior in the workplace

Organizational Culture

- Societal Values (Hofstede)
  - Values
- Professional Cultures (Powell and DiMaggio)
- Values of Founders (Schein)
- Group experiences, market Pressures (Schein)

Practices
What does Organizational Culture look like?

Professional Cultures
- Engineering
- Sales
- Manufacturing

Founder Culture O
- Shared Experience 1
- Shared Experience 2

Team 1
- National Culture N

Team 2
- Organization

Modeling Culture
Monday, August 06, 2007
Sources of Organizational Culture and cultural conflict

- National/Societal Culture
- Professional Values
- Founder Values
- Experiences

Organizational Culture

Value Differences (first order effects)
Practice Differences (second order effects)

Cross-Cultural Conflicts

Global Project Costs
- Direct
- Coordination
- Value Diff
- Practice Diff
- Other (Institutional)
How can we operationalize National culture differences?

Hofstede’s cultural dimensions

- Power Distance
- Collectivism vs. Individualism
- Masculinity vs. Femininity
- Uncertainty Avoidance
- Long Term vs. Short Term
A model for cross cultural interaction

- Task/Market needs
- Ordained Practices
- Interaction
- Org Climate
- Outcomes

National Culture: PDI, IDV, MAS, UAI
Leader Culture: PDI, IDV, MAS, UAI
Worker Culture: PDI, IDV, MAS, UAI
Expected Practices

Modeling Culture
Case Studies, Observations and Intuition

- Gerald Hines – lack of communication between Texan and Parisians
- Planet Hollywood
  - miscommunication costs in Asia
  - Loss of motivation in Japan
- Hofstede
  - UAI and PDI define organizational structure
  - Less IDV cultures communicate more implicitly
  - MAS dimension affects personality conflicts
- Increased error rate, decrease in productivity
## Case Studies

<table>
<thead>
<tr>
<th>Technological Problems</th>
<th>Political/Legal Problems</th>
<th>Sociocultural Problems</th>
<th>Economic Problems</th>
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<tbody>
<tr>
<td>Gerald Hines - France</td>
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<td>Factory – Sri Lanka</td>
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Hypotheses

- Lack of fit between a person’s culture and the organizational structure would lead to **motivational problems**
- Differences in the IDV scale will lead to **unclear communications**
- Differences in the MAS scale will lead to **Personality conflicts**
Modeling Process

- Observe
- Interview
- Induce a model
- Deduce some behavior
- Test Deductions

Delta (Δ)
Relating Culture to VDT

**Schein**
- Org and Environment
- Nature of Truth and Reality
- Nature of Human Nature
- Nature of Human Activity
- Nature of Human Relationships

**Hofstede (Org)**
- Loose vs Tight
- Norm vs Pragma
- Open vs Closed
- Employee vs Job
- Parochial vs Prof
- Process vs Results

**VT**
- IP
- EG
- DM
- IE
- AC
- ER

**Hofstede**
- UAI
- IDV
- MAS
- PDI
Modeling the Hypotheses

- Lack of Motivation
  - Slower processing speed
  - Higher error rate

- Unclear communication
  - Increase in errors on attending communication
  - Recommmunication requests

- Personality conflicts
  - Ignoring communications (to and fro)
VDT Modeling Theory

- **New Variables**
  - UAI, PDI, IDV, MAS
  - At both individual and Organizational levels

- **Current Actor Behavior**
  - Information Processing
  - Exception Generation
  - Decision Making
  - Information Exchange
  - Attending Meetings
    - (and communications?)
  - Reporting Exceptions

- Actor - Org
  - PDI, UAI

- Actor – Actor
  - IDV, MAS
Behavior Matrix Transformation

- $AB = \{IP, EG, DM, IE, AM, ER\}$
- $CV = \{PDI, IDV, UAI, MAS\}$
- $\Delta AB = [m]CV$
  - $[m] - Transformation matrix$
  - $\Delta IP = m PDI + n IDV + o UAI + p MAS$
- $\Delta AB = \Delta AB_O + \Delta AB_{AO} + \Delta AB_{AA}$
  - $\Delta AB_{AO} - IP, EG, DM$
  - $\Delta AB_{AA} - IE, AM, ER$
Example Transformation

Information Exchange Attendance

- High PDI, UAI cultures attend to information more seriously
- Low IDV cultures trust and regard information exchange highly
- Low IDV attends to high IDV communication
  - Higher quality of communications
  - VFP decreases
- High IDV attends to low IDV communication
  - Lower quality of communications
  - VFP increases
### Transformation matrices

#### Cultural Matrix

<table>
<thead>
<tr>
<th>PDI, UAI, IDV</th>
<th>H (3)</th>
<th>M (2)</th>
<th>L (1)</th>
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<td>1</td>
<td>1.05</td>
</tr>
<tr>
<td>AM</td>
<td>0.95</td>
<td>1</td>
<td>1.05</td>
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<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
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#### Cross- Cultural Matrix

<table>
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<th>ΔIDV</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
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<td>.95</td>
<td>.98</td>
<td>1</td>
<td>1.02</td>
<td>1.05</td>
</tr>
<tr>
<td>AM&lt;sub&gt;AO&lt;/sub&gt;</td>
<td>1.05</td>
<td>1.02</td>
<td>1</td>
<td>1.02</td>
<td>1.05</td>
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<tr>
<td>N</td>
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<td>1</td>
<td>1</td>
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Specific Steps

- Use anecdotes, Hofstede’s book, intuition to generate a set of Hypotheses
- Use these hypotheses to generate initial Behavior Matrices for testing
- Conduct interviews to test behavior matrices and hypotheses
- Model Behavior in VDT
- Use real project data to calibrate and validate new VDT model
Research Contributions

- Integration and synthesis of the current literature on organizational and national cultures
- Generation of validated hypotheses that describe behavior effects due to cultural differences
- Development of a computational model that can predict how and when cultural differences will affect project outcomes
- Development of theory that will help project managers optimize organizational performance on Global Projects
Questions